IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) A security document or device comprising:

a substrate including at least one layer of polymeric material:

an optical component formed by at least one orientating layer and at least one liquid crystal polymer (LCP) layer in contact with the orientating layer; and

an intermediate layer provided between the optical component and the substrate which improves the adhesion of the optical component to the substrate.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) A security document or device according to claim ~~2 [or claim 3]~~ 1 wherein the intermediate layer comprises a primer layer which includes a primer selected from the group of:

hydroxyl terminated polymers; or

hydroxyl terminated polyester based co-polymers; or

polyethyleneimine; or

cross-linked hydroxylated acrylates; or

uncross-linked hydroxylated acrylates; or

polyurethanes; or

UV-curing anionic acrylates; or

UV-curing cationic acrylates

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) A security document or device according to claims 1 ~~5 [or claim 6]~~ wherein the primer layer includes a cross-linker [is] selected from the group comprising:

isocyanates; or
multifunctional isocyanates; or
polyaziridines; or
ziconium complexes; or
aluminium acetylacetone; or
melamines; or
carbodi-imides.

8. (Cancelled)

9. (Currently Amended) A security document or device according to claim 1 ~~[any one of claims 1 to 8]~~ wherein the substrate is formed at least partly from a polymeric material.

10. (Currently Amended) A security document or device according to claim 1 ~~[any one of claims 1 to 9]~~ wherein the substrate includes at least one ~~[base]~~ layer of biaxially oriented polymeric material.

11. (Cancelled)

12. (Currently Amended) A security document or device according to claim ~~10~~9 wherein the substrate comprises a base layer ~~[of paper]~~ with at least one polymeric coating provided on one or both sides of the base layer.

13. (Cancelled)

14. (Currently Amended) A security document or device according to ~~[any one of claims 10 to 13]~~ claim 1 wherein the substrate ~~[further]~~includes a base layer formed from a transparent material, and at least one opacifying coating applied on at least one side of the base layer.

15. (Cancelled)

16. (Cancelled)

17. (Currently Amended) A security document or device according to claim 16 wherein the at least one opacifying coating comprises a major proportion of one or more opacifying pigments bound with a minor proportion of a cross-linkable polymeric binder.

18. (Currently Amended) A security document or device according to ~~[either]~~ claim 16 ~~[or claim 17]~~ wherein ~~[the]~~ said one or more opacifying pigment ~~[or pigments are]~~ is selected from the group including:

titanium dioxide (TiO_2);
calcium carbonate ($CaCO_3$);
barium sulphate ($BaSO_4$); and
zinc oxide ZnO.

19. (Currently Amended) A security document or device according to ~~[any one of claims 14 to 18]~~ claim 14 wherein one or more layers of printed indicia are provided on the at least one opacifying ~~[layers]~~ coating.

20. (Cancelled)

21. (Currently Amended) A security document or device according to ~~[any one of claims 13 to 10]~~ claim 14 wherein the at least one opacifying

coating only partially covers the transparent [substrate] base layer so as to form ~~[a]~~ at least one transparent portion or window which is not covered by the opacifying coating.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) A security document or device according to claim 21 [~~or claim 22~~] wherein the orientating layer and the LCP layer are applied at least partially within ~~[and partially outside]~~ the area of the window or windows.

27. (Cancelled)

28. (Currently Amended) A security document or device according to [~~any one of claims 1 to 27~~] claim 1 wherein the orientating layer is in intimate contact with the LCP layer.

29. (Cancelled))

30. (Currently Amended) A security document or device according to claim [~~29~~] 1 [wherein the photo-alignment] orientating layer is a photo-orientated polymer network (PPN).

31. (Cancelled)

32. (Cancelled)

33. (Currently Amended) A security document or device according to ~~[any one of claims 1 to 32]~~ claim 1 wherein a photo-orientated polymer network is applied to an orientating layer deposited on the substrate.

34. (Currently Amended) A security document or device according to ~~[any one of claims 1 to 33]~~ claim 1 wherein the LCP layer comprises an anisotropic layer of orientated cross-linked liquid crystal monomers.

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Currently Amended) A security document or device according to ~~[any one of claims 1 to 37]~~ claim 1 including further orientating layers and/or LCP layers.

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Currently Amended) A security document or device according to ~~[any one of claims 38 to 41]~~ claim 1 wherein two or more orientating layers and LCP layers having different orientation patterns are provided to form a stack of orientation layers and LCP layers on a substrate.

43. (Currently Amended) A security document or device according to [~~any one of claims 1 to 42~~] claim 1 further including a reflector layer.

44. (Cancelled)

45. (Currently Amended) A security document or device according to [~~any one of claims 1 to 42~~] claim 1 further including a polarizing layer.

46. (Cancelled)

47. (Cancelled)

48. (Cancelled)

49. (Currently Amended) A security document or device according to [~~any one of the preceding claims~~] claim 1 wherein the optical component formed by the combination of the at least one LCP layer and the at least one orientation layer contains at least one hidden image.

50. (Cancelled)

51. (Currently Amended) A security document according to [~~claim 43 or claim 44~~] claim 1 wherein the optical component is provided at a first [~~location~~] portion with a reflector or polarizing layer and a polariser is provided in a window at a second, laterally spaced [location] portion so that the security document is self-authenticating by folding the document to bring [~~the windows~~] the first and second portions into register.

52. (Cancelled)

53. (Original) A method of manufacturing a security document or device comprising:

providing a substrate which includes at least one layer of polymeric material;

applying a primer layer on at least one side of the substrate;

applying an orientating layer over the prime layer;

aligning the molecules of the orientating layer; and

applying a liquid crystal polymer (LCP) layer over the orientating layer.

54. (Original) A method according to claim 53 wherein the step of applying the primer layer is performed by applying a primer including a polymer component and a cross-linker.

55. (Cancelled)

56. (Cancelled)

57. (Currently Amended) A method according to [~~any one of claims 53 to 56~~] claim 53 wherein the step of applying the orientating layer over the primer layer is performed by applying a solution containing a photo orientating polymer network (PPN) over the primer layer.

58. (Original) A method according to claim 57 further including the step of drying the substrate to remove solvent from the PPN solution wherein a strong adhesive bond is formed between the orientating layer and the substrate.

59. (Currently Amended) A method according to [~~any one of claims 53 to 58~~] claim 53 wherein the orientating layer includes a photoalignment layer and further including the step of exposing the photoalignment layer to polarized light to align the molecules of the photoalignment layer.

60. (Currently Amended) A method according to claim 59 wherein the photoalignment layer is subjected to a first exposure of polarized light through a mask to form local regions having a first orientation of molecules, and wherein the photoalignment layer is subjected to a second exposure without a mask using a different component of the polarized light to form local regions having a second orientation to form an orientation pattern in the orientating layer.

61. (Cancelled)

62. (Currently Amended) A method according to claim 59 wherein an orientation pattern is formed in the photoalignment layer and/or the LCP layer [~~without the use of a mask~~] by a variable printing process

63. (Cancelled)

64. (Original) A method according to claim 62 wherein the orientation pattern is formed by a laser writing process.

65. (Currently Amended) A method according to [~~any one of claims 53 to 64~~] claim 53 wherein the LCP layer is formed by applying a coating of liquid crystal monomers to the orientating layer such that the liquid crystal molecules assume the orientation of the molecules of the underlying orientating layer, and cross linking the monomers to fix the orientation of the liquid crystal molecules.

66. (Currently Amended) A method according to claim 65 further including the step of applying a second orientating layer on the LCP layer, and applying a second LCP layer on the second orientating layer.

67. (Cancelled)

68. (Currently Amended) A method according to claim [~~67~~] 66 wherein the second orientating layer is exposed to linear polarized light through a mask having a different pattern to the mask used to produce the orientation pattern in the first orientating layer to produce a different orientation pattern in the second orientating layer.